

# PHENIX WEEKLY PLANNING



12/6/12

Don Lynch

TECHNICAL  
SUPPORT  
2012

## Last Week

TECHNICAL  
SUPPORT  
2012

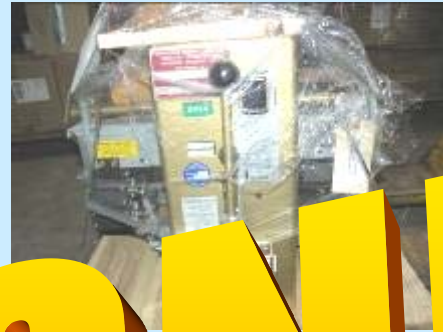
- Continue installing VTX/FVTX (Install east  $\frac{1}{2}$  (Done), finish survey (Done), continue connecting cabling and services)
- Re-install MMN access panel on lampshade - Done
- Substation breaker upgrade/test (CAD) (Dec 1) - Done
- Remove South Sta. 1 scaffolding - Done
- Move MuID collars to IR - Done
- Move manlift, plates and 12 ton cart to AH - Done
- Install MTP patch bay and jumpers for FVTX in counting house - Done
- Add several backup MTP fibers from CH to IR
- Move EC to IR
- Continue VTX Cooling System Upgrade
- Continue RPC3 Gas Recirculation Upgrade
- Continue working on RPC3 shielding
- Continue window Washer safety upgrades
- Continue sPHENIX design support
- Continue MPC-Ex design support
- Continue Prepping EC for move to IR

## Next Week

TECHNICAL  
SUPPORT  
2012

- Continue installing VTX/FVTX (continue connecting cabling and services)
- Add several backup MTP fibers from CH to IR
- Move EC to IR
- Restore EC services
- Move MMS to run position
- Re-install MuID Collars
- Re-install EC dumbwaiter and ladder (evaluate ladder safety?)
- Complete VTX Cooling System Upgrade
- Continue RPC3 Gas Recirculation Upgrade
- Continue working on RPC3 shielding
- Continue window Washer safety upgrades
- Continue sPHENIX design support
- Continue MPC-Ex design support
- Begin Pink/White/Blue sheets

# Substation breaker upgrade/test (CAD)



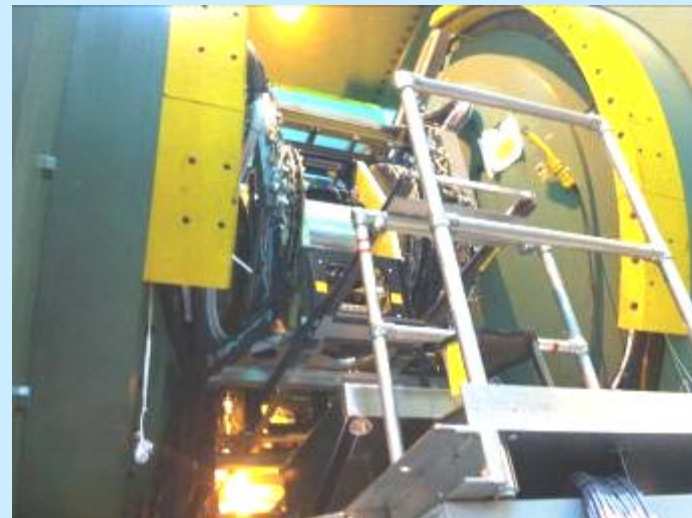
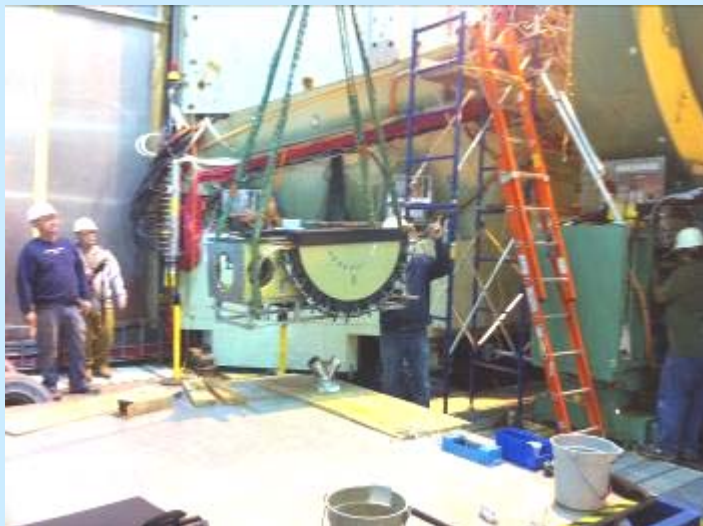
**DONE**

Upgrade & Test to be performed  
 Sec 1. Drawings/wiring schemes  
 by P. Giannotti have been reviewed  
 and approved by CAD. Paul will be  
 present and work with line crew to  
 install and with CAD to test (blue  
 sheet test)





TECHNICAL SUPPORT

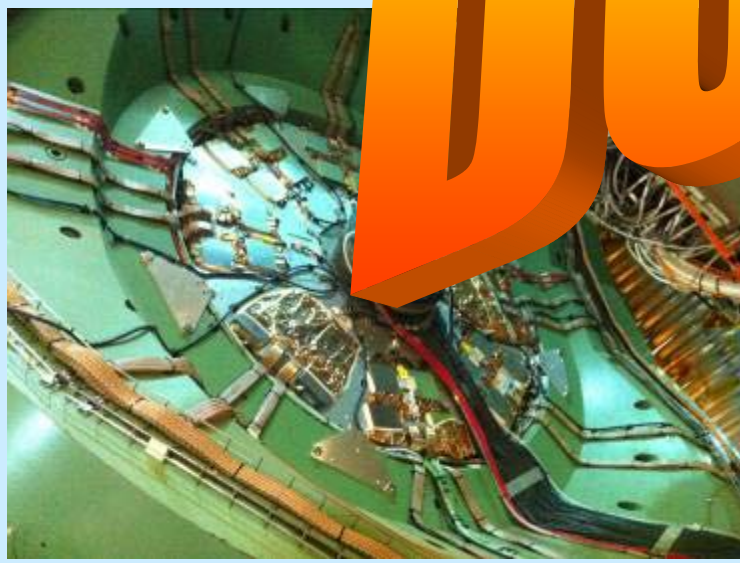


# RPC Station 1 North and South Cooling Upgrade & Monitoring

TECHNICAL SUPPORT



South

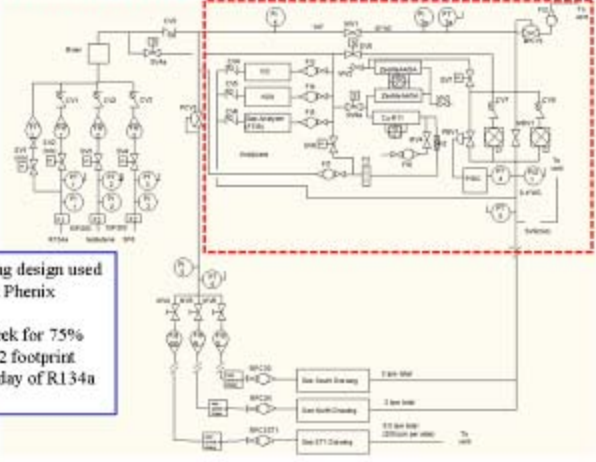


North

**DONE**



## Run 12 Shutdown Work Overview Gas/Cooling Systems Recirculating Upgrade to RPC Gas System



- Based on working design used for many years at Phenix
- Save money
  - \$3k per week for 75%
- Reduces lab CO2 footprint
  - 60 lbs per day of R134a

June 20, 2012

15



## VTX/FVTX Cooling Upgrade

- Piping ~ done
- New filtration system in place, mostly connected
- Big Wheel manifolds assembled ready for installation at 1008
- Chiller 1 repair done

## RPC Recirculation Upgrade

Recirculation Piping installation - In Progress

GMH rack moving along  
Purification system controls assembly,  
installation and testing - D. Northacker to finish  
in December

PC upgrade - November

Analyzer procurement in process (~4 months)



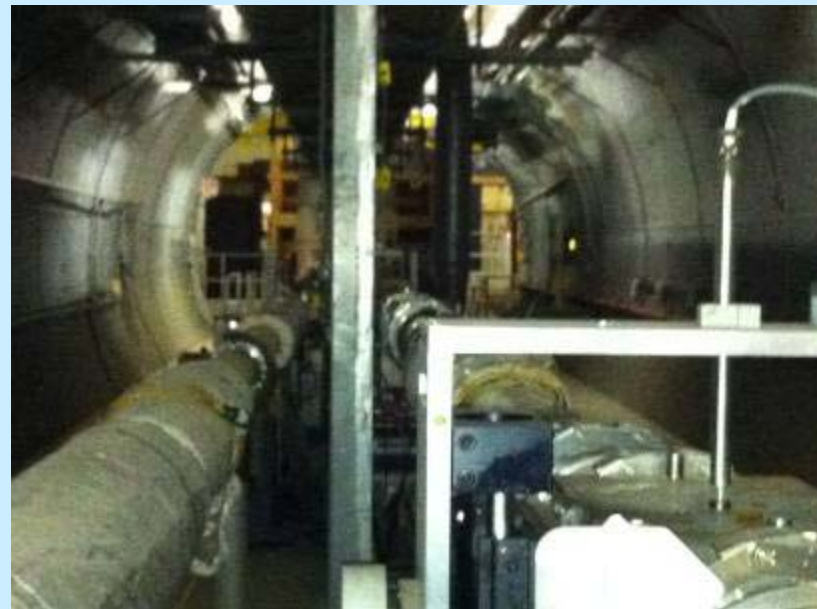
## RPC Background Attenuation Project

TECHNICAL SUPPORT 2012



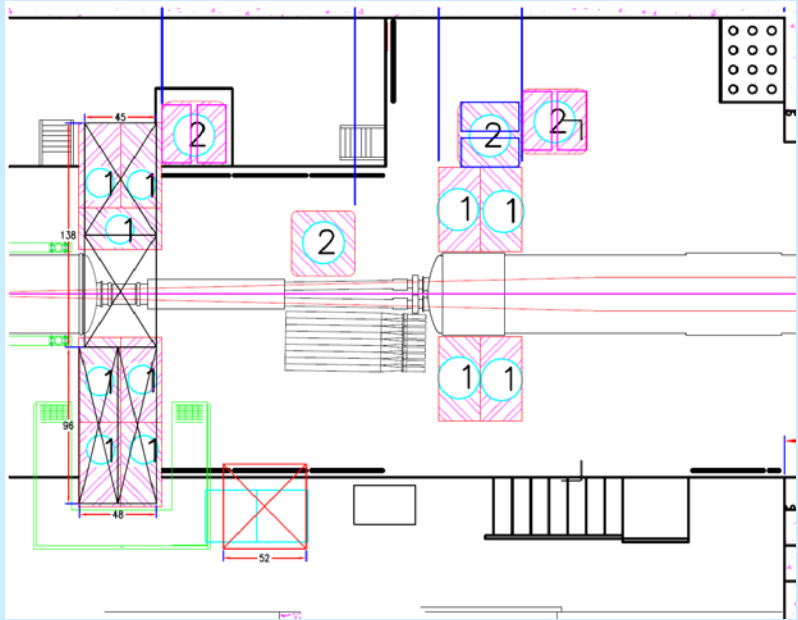
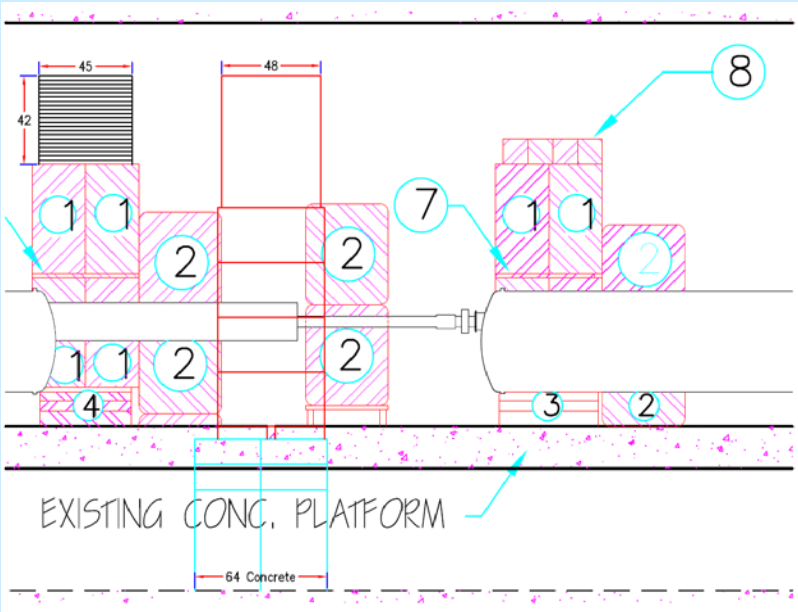
Looking towards RPC3 North  
 ← East                      West →

Large shielding modifications at Q2 upstream  
 north and south to be planned and installed by  
 CA-D (Dave Phillips) by 12/14/2012. **In**  
**progress this week**



Looking towards RPC3 South  
 ← West                      East →





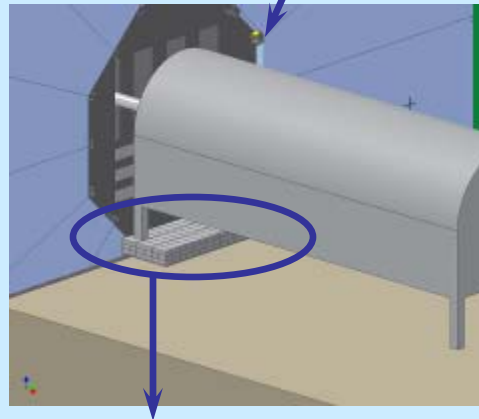
# RPC Background Attenuation Project

TECHNICAL SU

Under DX at RPC3 North  
 ← East                      West →



Under DX at RPC3 South  
 ← West                      East →

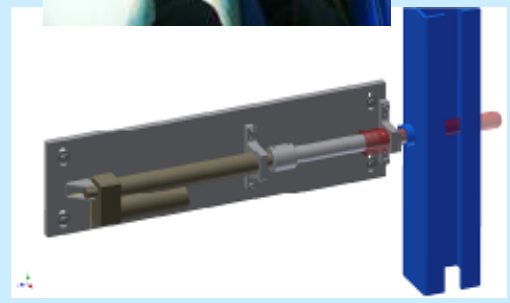
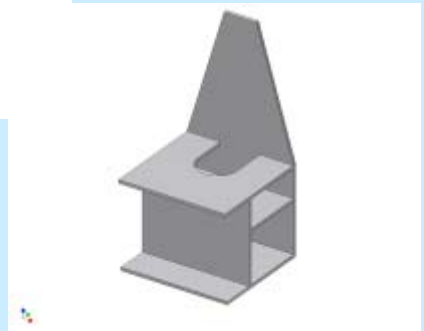
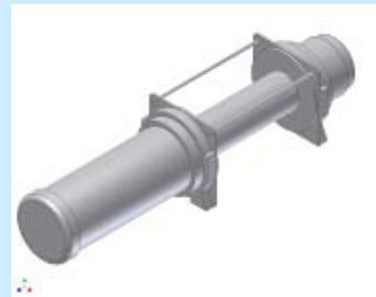


144 Steel bricks, 2x4x8,  
 stacked in 3 high, 16 wide, 3  
 rows, respectively by 11/21



# Window Washer Remote Pin Removal and Winch/spooler safety upgrades

Space available:  
16.5" x 27" x 28" h



**New Electrical Work** for 2012 Shutdown, to be accomplished as time is available

1. Remote breaker switch - parts ready install partially completed. Repaired broken breaker installation and blue sheet test of breaker scheduled fore Dec. 1 - Done

### PHENIX Electronics Upgrades

1. Install second MODBUS server in counting house. - TBD

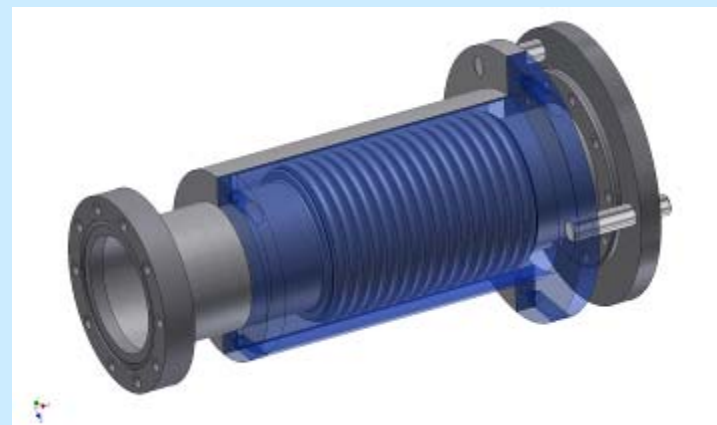
**Additional Work for 2012**, not yet scheduled, to be fit in as available

1. identify obsolete services passing through sill and remove them. - As time is available
2. Cover for services coming from IR through sill. - After Shutdown
3. Plan for stripping out TEC electronics and services to free up TEC racks. - As time is available

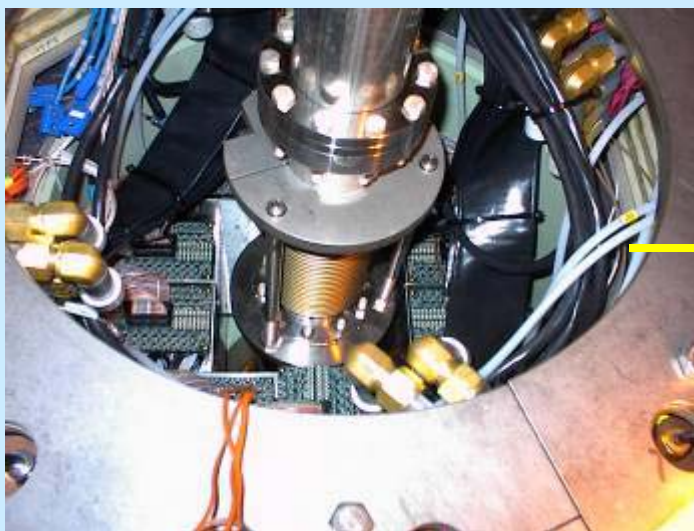




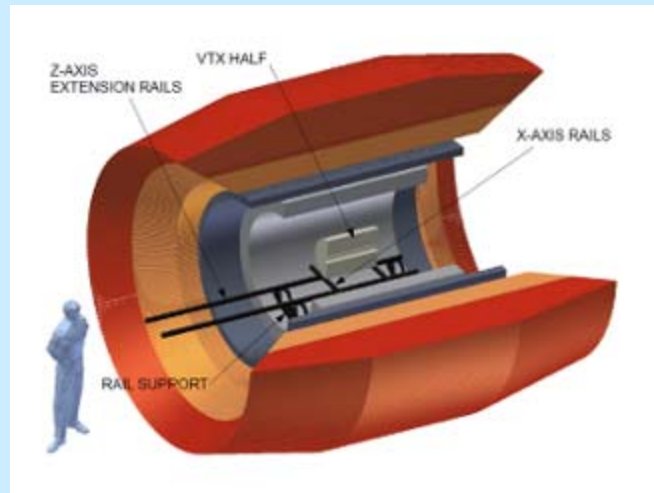
Existing vacuum bellows anti-squirm  
In MPC S Cavity



Proposed vacuum bellows anti-squirm  
In MPC S Cavity to accommodate MPC-Ex



MPCS Flat cables replaced with round cables.

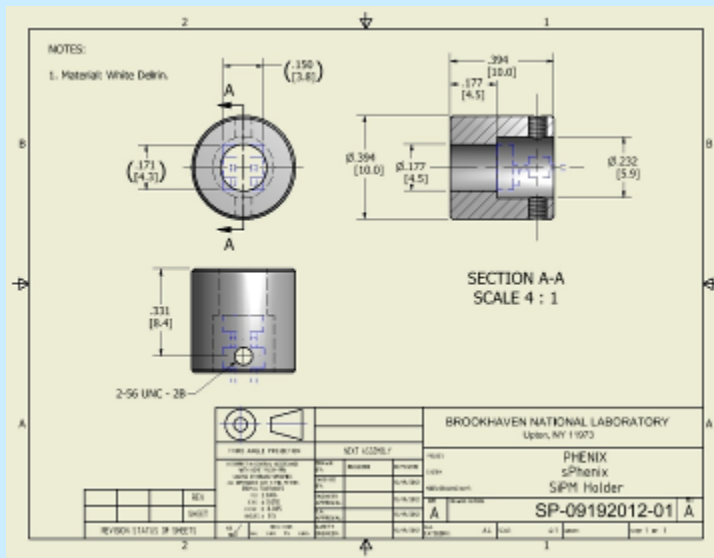
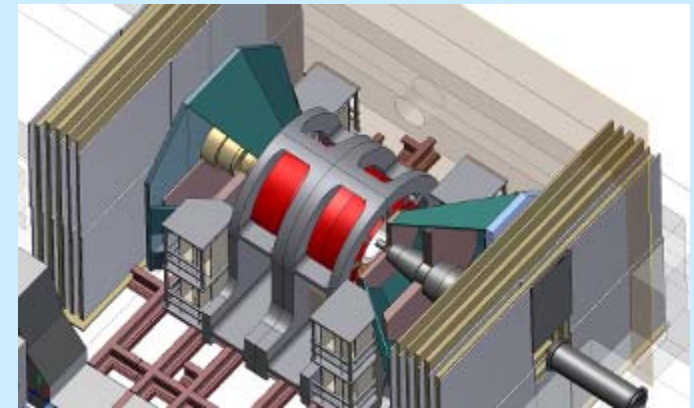


## sPHENIX Proposed Upgrade

Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

BNL Review last week

Prototype HCal and EMCal in progress



Silicon Photo  
Multiplier Holder

## TECHNICAL SUPPORT 2012

|  |                    |
|--|--------------------|
| Re-install MMN access panel on lampshade                                   | Done               |
| Prep for EC roll in  | Done               |
| Substation breaker upgrade/test (CAD)                                      | Done               |
| Install MTP patch bay and jumpers for FVTX in counting house.              | Done               |
| Add several backup MTP fibers from CH to IR - November                     | 12/7/2012          |
| MuID Collars to IR, plates, manlift and 12 ton cart to AH,<br>& Roll in EC | 12/3-12/7          |
| Prep IR for run  | 12/7-12/12/2012    |
| VTX Cooling System Upgrades  | 12/12/2012         |
| RPC tunnel Shielding (Dave Phillips)                                       | 12/14/2012         |
| RPC Recirculation Upgrade (except analyzer)                                | 12/21/2012         |
| RPC Shielding under DX magnets   | 12/21/2012         |
| Window Washer pin & spool upgrades   | 12/21/2012         |
| Christmas Holidays   | 12/21-1/1/2013     |
| Pre-run commissioning and prep for run 13                                  | 1/11/2013          |
| Pink/Blue/White sheets   | 12/12/12-1/11/2013 |
| Start run 13   | 2/11/2013          |

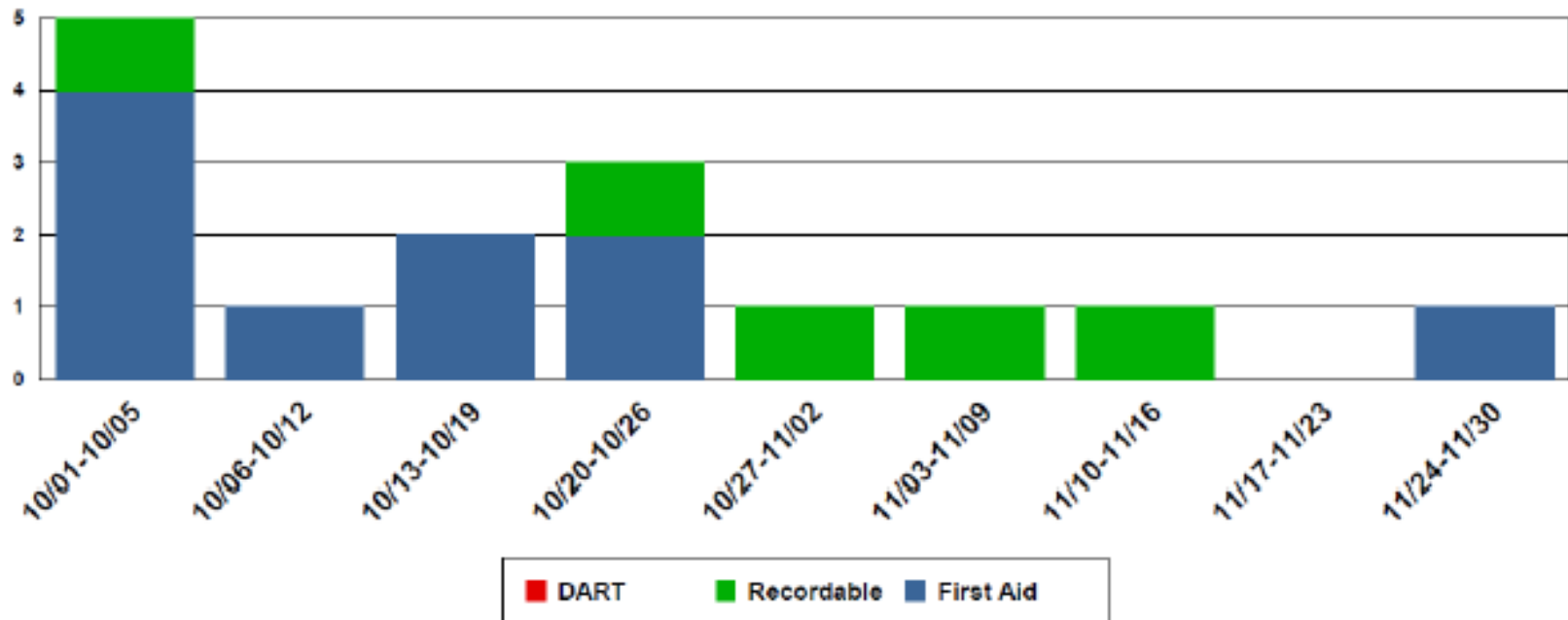
1. PHENIX Annual Safety Review - (Don, Paul, Rob)
2. Power Outage ?
3. New Ladder Interim SBMS





| Recent Events |                |   |
|---------------|----------------|---|
| 11/28/12      | Non-Reportable | After a bucket lift finished having its two lead-acid batteries charged in B1006, it was started up and experienced a battery failure soon after startup before the lift was even moved. Investigation showed that the battery, which was in a closed compartment, had the top of one cell fail. There was no impact to the environment from acid and no personal injury. The lift is currently out of service awaiting battery replacement. ( <a href="#">Event Link</a> )   |
| 11/27/12      | Non-Reportable | BNL Fire Rescue responded to an alarm of fire in Building 490. The cause of the alarm was traced to smoke generated by an overheated ventilation fan. The fan was removed from service and electrically isolated by BNL electricians. No one was injured. There was no fire. ( <a href="#">Event Link</a> )   |
| 11/26/12      | SC-3           | A Science Education Center employee experienced a very minor electrical shock (tingling sensation) while plugging a computer into a 120Vac convenience outlet. The employee further stated that treatment by OMC was not necessary. At this time, the 120V convenience outlet is believed to be the cause. The outlet was removed from service pending further investigation/remediation by BNL electricians.<br>UPDATE: 11-29-12, On 11-27-12, the employee reported to OMC and was cleared to return to work without restriction. After further evaluation, Management has elected to raise the reportability of this event to a SC-3 Management Concern Occurrence Report. ( <a href="#">Event Link</a> )  |
| 11/26/12      | Non-Reportable | A Heavy Equipment Mechanic/Operator was transporting a piece of construction equipment on a flat low bed trailer pulled by a front end loader. The transportation route proceeded northbound on Rochester St. to Brookhaven Ave. After making the right turn onto eastbound Brookhaven Ave., the hitch pin connecting the trailer to the tow vehicle snapped in half. The trailer dropped, coming to rest on the trailer's landing gear. The safety chains from the trailer remained attached to the tow vehicle, keeping the trailer under control at all times. The trailer was re-attached to the tow vehicle using a new tow hitch pin, and transportation of the equipment to the job site continued without further incident. There were no injuries nor property damage resulting from this incident. ( <a href="#">Event Link</a> ) |
| 11/26/12      | Non-Reportable | While unloading a shipment of material from a steel pallet at Building 98, a nitrogen cylinder fell to the floor when the tie-down straps were removed. No one was injured and there was no apparent damage to the cylinder. ( <a href="#">Event Link</a> )   |
| 11/21/12      | SC-3           | Waste management personnel entering the Building 855 RCRA Reactive Waste processing room discovered that a pint bottle of Borane Tetrahydrofuran complex solution had apparently over pressurized. The over pressurization caused the glass container to shatter and dislodge a metal shelf above the container. Further investigation is under way. There was no evidence of fire, and personnel were not present at the time of the over pressurization. ( <a href="#">Event Link</a> )   |

## Injuries Per Week (FY) As of 11/30/2012



### Injury Status:

FY13 YTD: DART – 0, TRC – 5, First Aid – 10

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/OocInj/BNLIInjuries.aspx>

### Recent Injuries

|          |           |  |
|----------|-----------|--|
| 11/26/12 | First Aid | An employee walked into the edge of a door and received a mild contusion to the face. At the OMC, first aid was given.<br>( <a href="#">Event Link</a> ) |
|----------|-----------|--|

## Where To Find PHENIX Engineering Info

PHENIX Holiday Dinner Next Week

[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)

